Acquisition Directorate

Program Executive Officer

HSI in Coast Guard Acquisitions: The PEO's Perspective

CG-93 | RDML Joe Vojvodich

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USCG Acquisition Programs

Overview

- USCG is investing approximately $30 B in major acquisition projects that acquire & modernize the service's ships, boats, aircraft, & C4ISR systems. This "recapitalizing" of older & difficult-to-maintain assets is essential to carry out CG missions, which help ensure our nation's maritime security.
- DHS acquisitions & SE framework & requirements flow to USCG via the Major Systems Acquisition Manual (MSAM)
- Guided by MSAM, PEO & PMs work collaboratively with the sponsors' representatives, CG resource manager, **technical authorities** & other partners in the Mission Support Organization. The PEO ensures that CG acquisition project management uses proven best practices to deliver value for the taxpayers' dollars & meets CG operational requirements.

Scope & Complexity of Acquisition Projects

Surface

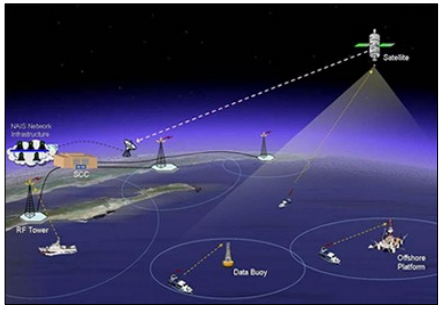
- National Security Cutter
- Offshore Patrol Cutter
- Mission Effectiveness Project
- Great Lakes Ice Breaker Replace
- Fast Response Cutter
- Response Boat-Medium
- Coastal Patrol Boat
- Response Boat-Small
- Long Range Interceptor / Short Range Pr

Air

- HC-130H/J Long Range Surveillance Aircr
- HC-144A Medium Range Surveillance Airc
- HH/MH-60T Helicopter Upgrade
- HH/MH-65C Multi-mission Cutter Helicop
- Vertical Takeoff and Landing Unmanned Aerial Vehicle

C4ISR

- Rescue 21
- Nationwide Automatic Identification System
- Interagency Operations Centers / Command 21
- C4ISR Platform and Facility Upgrades

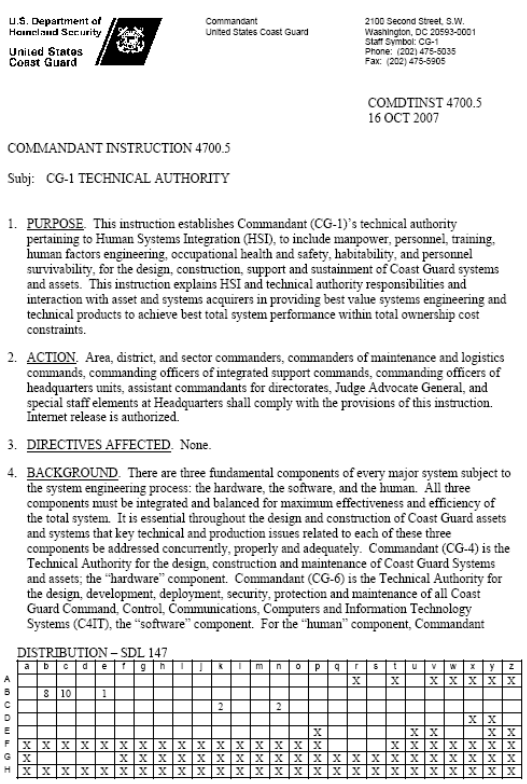


Changing Acquisitions Landscape

Acquisition Reform/Modernization

- Establishment of CG-9 CAO and PEO
- Assertion of CG System Integrator Role
- Emphasis on Acquisition Professionalism & Certification
- Establishment of Technical Authorities (CG-1, CG-4, CG-6) Independent of CAO
- Requirements Driven Process
- Major Systems Acquisition Manual
- Consolidation of CG-1/-4/-6/-9 under DCMS

CG-1 is Technical Authority for HSI Ensures Systems Built for People



U.S. Department of Homeland Security
United States Coast Guard

Commandant
United States Coast Guard

2100 Second Street, S.W.
Washington, DC 20593-0001
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Phone: (202) 475-5035
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COMDTINST 4700.5
16 OCT 2007

COMMANDANT INSTRUCTION 4700.5

Subj: CG-1 TECHNICAL AUTHORITY

1. PURPOSE. This instruction establishes Commandant (CG-1)'s technical authority pertaining to Human Systems Integration (HSI), to include manpower, personnel, training, human factors engineering, occupational health and safety, habitability, and personnel survivability, for the design, construction, support and sustainment of Coast Guard systems and assets. This instruction explains HSI and technical authority responsibilities and interaction with asset and systems acquirers in providing best value systems engineering and technical products to achieve best total system performance within total ownership cost constraints.

2. ACTION. Area, district, and sector commanders, commanders of maintenance and logistics commands, commanding officers of integrated support commands, commanding officers of headquarters units, assistant commandants for directorates, Judge Advocate General, and special staff elements at Headquarters shall comply with the provisions of this instruction. Internet release is authorized.

3. DIRECTIVES AFFECTED. None.

4. BACKGROUND. There are three fundamental components of every major system subject to the system engineering process: the hardware, the software, and the human. All three components must be integrated and balanced for maximum effectiveness and efficiency of the total system. It is essential throughout the design and construction of Coast Guard assets and systems that key technical and production issues related to each of these three components be addressed concurrently, properly and adequately. Commandant (CG-4) is the Technical Authority for the design, construction and maintenance of Coast Guard Systems and assets; the "hardware" component. Commandant (CG-6) is the Technical Authority for the design, development, deployment, security, protection and maintenance of all Coast Guard Command, Control, Communications, Computers and Information Technology Systems (C4IT), the "software" component. For the "human" component, Commandant

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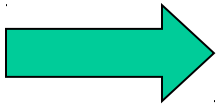


U.S. Department of Homeland Security
United States Coast Guard

Major Systems Acquisition Manual (MSAM)

COMDTINST M5000.10

Overview of CG HSI

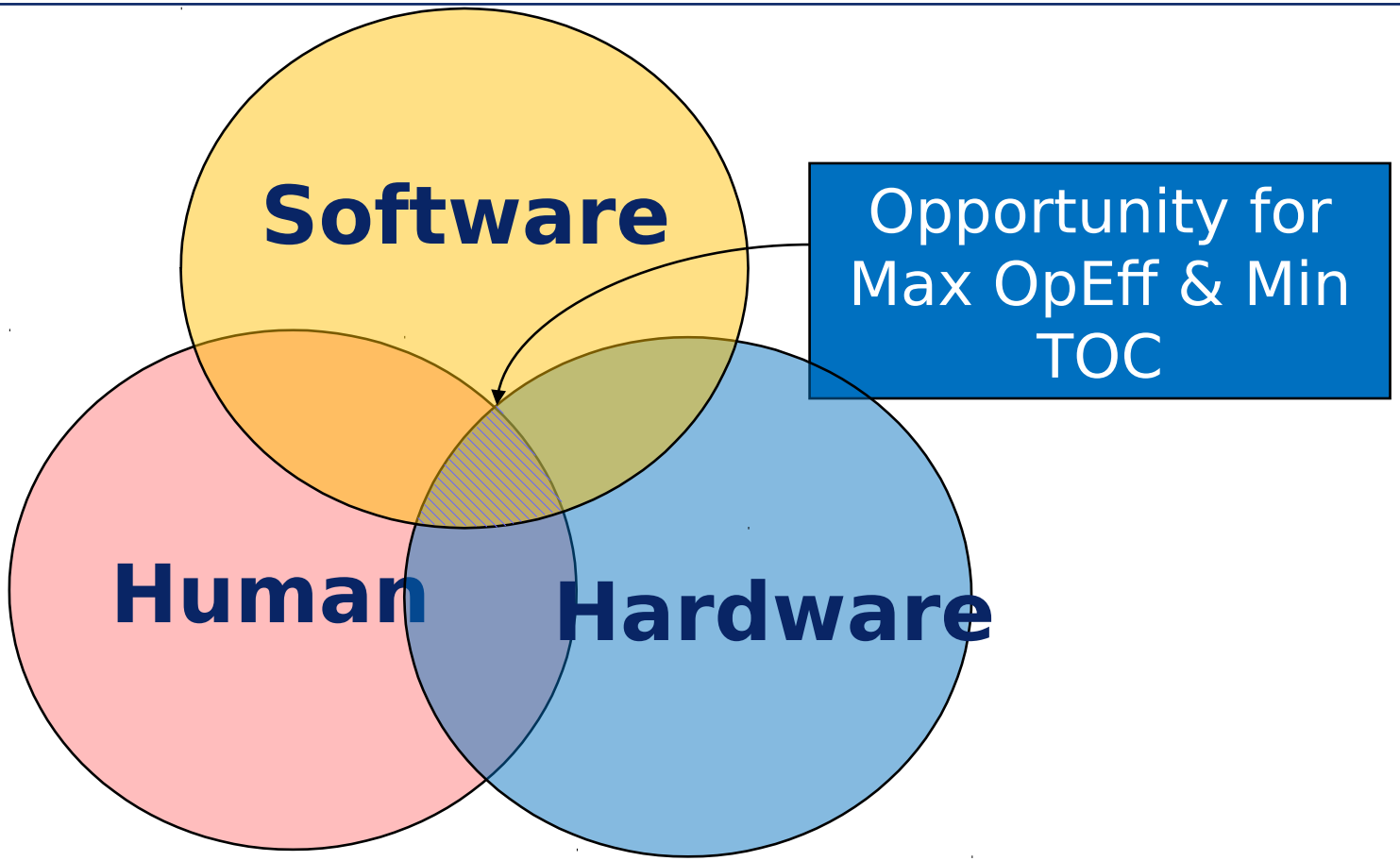
Technical & Management Approach

- Maximize Total System Engineering & Performance
- Minimize Total Ownership Cost

7 Integrated Domains

- Manpower
- Personnel
- Training
- Human Factors Engineering (HFE)
- System Safety/Occupational Health
- Habitability
- Personnel Survivability

HSI – Systems Engineering vs. Logistics Approach



Total System View

Internal CG HSI Relationships

- Link to Acquisitions (CG-9)
  - Resources
  - Policy
  - Projects
  - Governance/IPPD Structure
  - R&D
- Link to Other Technical Authorities (CG-4, CG-6)
- Link to Sponsors (CG-7, CG-2)
- Link to FORCECOM (FC-T)
- Link to Resources (CG-8, IRB)
  - Requirements vs. Resources, Mission Risk

External CG HSI Relationships

- Engagement with USN
  - Naval Systems Commands: NAVSEA, NAVAIR, SPAWAR
  - Naval Surface Warfare Centers
  - Navy Manpower Analysis Center (NAVMAC – CG Det)
  - Naval Postgraduate School (HSI Graduate Program)
  - Navy HSI Working Group
  - Naval Ordnance Safety and Security Activity (NOSSA)
  - Weapon System Explosives Safety Review Board (WSESRB)
- Engagement across DOD: Joint HSI Working Group
- Engagement with DHS: S&T Partnering

Semper Paratus